

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph no. 3 of page 1 with the following amended paragraph:

In the case of connecting a flat cable FD to an electrical equipment or the like as shown in Fig. 9, ~~there is used~~ one may use, for example, a press-contacting connector 110 which is attached to an end portion of the flat cable FD (see, for example, JP-A-2002-223513 (Pages 2 and 3, Fig. 1)).

Please replace paragraph no. 5 [bridging pages 1 and 2] with the following amended paragraph:

Insulated conductors D of the flat cable FD, press-contacted with press-contacting blades of the press-contacting terminals projecting from the rear end face of the connector body 111, are fixedly held by the retainer member 112 in such a manner that each of the insulated conductors D is bent at right angles. The insulated conductors D are cut such that cut end faces 113a and 113b of these conductors are arranged in a staggered manner, and with this arrangement a creeping distance between the adjacent conductors is increased so that a leakage current is less ~~liable~~ likely to flow.

Please replace paragraph no. 2, page 2 with the following amended paragraph:

In recent years, with a compact design of electrical equipments and the like, press-contacting connectors for connection to a flat cable have been formed into a compact design, and press-contacting blades of press-contacting terminals for being received in such a press-

contacting connector have also been formed into a smaller size, and the pitch of the press-contacting blades has been precisely set.

Please replace paragraph no. 4, page 2 with the following amended paragraph:

However, when the press-contacting connector is thus attached to the end portion of the flat cable, ~~there is encountered a problem~~ a problem exists in that an extra portion for holding and fixing purposes is formed at the end portion of the flat cable. There is a possibility that such an undesirable extra portion causes the flow of a leakage current or the short-circuiting between the conductors. Therefore, ~~it may be proposed~~ one approach is to remove the extra portion by cutting ~~after it subsequent to~~ the press-contacting operation, but this ~~invites a problem that the step of cutting approach is undesirable because an additional step of cutting the extra portion is added; so that~~ Thus, the efficiency of the operation is lowered, and ~~besides~~ the cost of installation increases.

Please replace paragraph no. 1, page 3 with the following amended paragraph:

When a pulling force acts on the flat cable, the press-contacting blades of the press-contacting terminals, formed into a smaller size as a result of the compact design of the press-contacting connector, are ~~liable to be~~ subject to being affected at the press-contacted portions by this force. Therefore, the fixing or holding of the flat cable only by the cover is not sufficient, and the press-contacting connector, in some cases, fails to exhibit a sufficient strength to withstand the pulling load acting on the flat cable.

Please replace paragraph no. 3, [bridging pages 3 and 4] with the following amended paragraphs:

~~In order to achieve the above object, according to the present invention, there is provided an end processing structure of a flat cable, comprising:~~

~~—— a flat cable, including:~~

~~—— a plurality of sheathed conductors, each conductor being covered with an insulative sheath; and~~

~~—— a plurality of connecting portions, each interconnecting the sheathed conductors arranged in parallel, wherein the flat cable has an interconnecting part in which the sheathed conductors are interconnected with the connecting portions, and a press-contacting part in which the sheathed conductors are separated with each other;~~

~~—— a connector housing;~~

~~—— a plurality of pressure terminal fittings, respectively having press-contacting blades, and mounted in the connector housing; and~~

~~—— a cover, attached to the connector housing to cover the press-contacting part of the flat cable which is press-contacted with the press-contacting blades;~~

~~—— wherein a first interconnecting part extended from the press-contacting part and having end faces of a distal end portion of the flat cable is drew out from a first side of the cover along an outer face of the cover;~~

~~wherein a second interconnecting part extended from the press-contacting part is
draw out from a second side of the cover along the outer face of the cover;~~

~~wherein the first interconnecting part of the flat cable is superposed on the second
interconnecting part of the flat cable; and~~

~~wherein a superposed portion of the first and second interconnecting parts are
wound so as to surround the end faces of the distal end portion to insulate the end faces from an
exterior by a binding member.~~

In order to achieve the above object, according to the present invention, there is provided
an end-processing structure of a flat cable comprising a flat cable, a plurality of sheathed
conductors, a plurality of connecting portions, a connector housing, a plurality of pressure
terminal fittings, and a cover.

The end-processing structure is further defined by the flat cable including a plurality of
sheathed conductors, wherein each conductor is covered with an insulative sheath. Also, the
plurality of connecting portions are interconnecting the sheathed conductors arranged in parallel,
wherein the flat cable has an interconnecting part in which the sheathed conductors are
interconnected with the connecting portions, and a press-contacting part in which the sheathed
conductors are separated with each other. Further, the plurality of pressure terminal fittings
respectively have press-contacting blades and are mounted in the connector housing.
Additionally, the cover is attached to the connector housing to cover the press-contacting part of
the flat cable which is press contacted with the press-contacting blades.

Furthermore, the end process structure includes a first interconnecting part extended from the press-contacting part and having end faces of a distal end portion of the flat cable is folded back from a first side of the cover along an outer face of the cover and a second interconnecting part extended from the press-contacting part is folded back from a second side of the cover along the outer face of the cover. Moreover, the first interconnecting part of the flat cable is superposed on the second interconnecting part of the flat cable and a superposed portion of the first and second interconnecting parts are wound so as to surround the end faces of the distal end portion to insulate the end faces from an exterior by a binding member.

Please replace paragraph no. 3, page 4 with the following amended paragraph:

Preferably, a guiding member is formed on the outer face of the ~~eaver~~cover so as to guide the flat cable which is ~~drew-out~~folded back from the cover along the outer face of the cover.

Please replace paragraph no. 4, page 7, with the following amended paragraph:

~~And besides~~Further, the distal end portion (which is the extra portion) is folded back to be superposed on the central-side portion of the flat cable in such a manner that the end portion of the flat cable is extended along the outer face of the cover, and then these superposed portions are bound by the binding member. By doing so, the end portion of the flat cable is fixed to the outer face of the cover in intimately-contacted relation thereto, and therefore even when a pulling force acts on the flat cable, the press-contacted portions are less liable to be affected by this force.

Please replace paragraph no. 10 [bridging pages 8 and 9] with the following amended paragraph:

Fig. 9 is a perspective view showing ~~one related~~ a conventional flat cable end-processing structure.

Please replace paragraph no. 4, page 9 with the following amended paragraph:

Insulating interconnecting portions 20 are ~~removed by cutting~~ cut away from the end portion of the flat cable FD over a predetermined range except a distal end portion 21 of the flat cable, thereby forming a press-contacting portion 22 at the end portion of the flat cable, and the distance between any two adjacent insulated conductors D at the press-contacting portion 22 can be adjusted in a direction of a width of the flat cable (see Fig. 6).

Please replace paragraph no. 3, page 11 with the following amended paragraph:

As shown in Figs. 3 and 4, the cover 70 has a generally flat plate-like shape, and lock arms 71 are formed on and project respectively from right and left sides, respectively, of this cover. These lock arms 71 are retainingly engaged respectively with the retaining projections 68 of the connector housing 60, thereby preventing the cover 70 from being disengaged from the connector housing 60.

Please replace paragraph no. 4, [bridging pages 11 and 12] with the following amended paragraph:

Guide ribs 51a, corresponding to the guide recesses 64U, are formed in an upper face of the cover 70 so as to guide the insulated conductors D rearwardly, while guide ribs 51a, corresponding to the guide recesses 64L, are formed in a lower face of the cover 70 so as to guide the insulated conductors D rearwardly. These guide ribs 51a extending in the forward-rearward direction. Pressing projections 72 are formed on an inner face of the cover 70 for respectively pressing the insulated conductors D in the press-contacting direction ~~are formed on an inner face of the cover 70.~~

Please replace paragraph no. 5, page 12 with the following amended paragraph:

Then, the flat cable FD is held by a wire holder 82a located near ~~to~~ the wire supply machine 80, and the flat cable FD is severed as shown in Fig. 5B. Press-contacting portions 22 are formed respectively at those portions of the flat cable disposed respectively at those sides of the wire holders 81a and 82a close to a central portion of the flat cable, ~~and~~ . Additionally, at each of these press-contacting portions 22, insulating interconnecting portions 20 are removed by cutting over a predetermined range in the longitudinal direction so that the distance between any two adjacent insulated conductors D can be adjusted in the direction of the width of the flat cable.

Please replace paragraph no. 6, [bridging pages 12 and 13] with the following amended paragraph:

Then, as shown in Fig. 5C, wire holders 81b and 82b are located respectively at those sides of the two wire holders 81a and 82a, and are disposed close to the central portion of the flat cable FD, in such a manner that the press-contacting portion 22 is disposed between the wire holders 81a and 81b while the other press-contacting portion 22 is disposed between the wire holders 82a and 82b so that connector housings 60 can be press-contacted with the two press-contacting portions 22 of the flat cable FD, respectively. The wire holders 81a and 81b (~~82a and 82b~~)and wire holders 82a and 82b are located respectively at front and rear sides (spaced from each other in the longitudinal direction) of the corresponding press-contacting portion 22, and fixedly hold a corresponding distal end portion 21 and a corresponding central-side portion of the flat cable FD against movement, so that a predetermined tension is imparted to each press-contacting portion 22.

Please replace paragraph no. 3, page 13 with the following amended paragraph:

At this ~~time~~ point, the distal end portion 21 and central-side portion of the flat cable FD, disposed respectively at the front and rear sides (spaced from each other in the longitudinal direction) of the press-contacting portion 22, are fixedly held against movement, and also the distance between the adjacent insulated conductors D of the press-contacting portion 22 can be adjusted in the direction of the width,~~and therefore.~~ Thus, the insulated conductors D are accurately positioned in accordance with the highly-precise pitch of the press-contacting blades 42, and are positively press-contacted with these press-contacting blades as shown in Fig. 6.

Please replace paragraph no. 4, page 14 with the following amended paragraph:

The end faces 31 of the distal end portion 21 are covered with the wound binding member 30 so as to be insulated from the exterior, ~~and besides~~. Further, the insulated conductors D at the distal end portion 21 are held at the predetermined intervals by the insulating interconnecting portions 20. Therefore, the end faces 31 of the adjacent conductors S will not be accidentally moved toward each other, and therefore the current leakage and the short-circuiting are positively prevented.

Please replace paragraph no. 5, [bridging pages 14 and 15] with the following amended paragraph:

~~And besides~~ Additionally, the distal end portion 21 (which is the extra portion) is folded back to be superposed on the central-side portion of the flat cable FD in such a manner that the end portion of the flat cable FD is extended along the outer face of the cover 70, and then these superposed portions are bound by the binding member 30. In this configuration, the end portion of the flat cable FD is fixed along the outer face of the cover 70 in intimately-contacted relation thereto, Thus, ~~and therefore~~ even when a pulling force acts on the flat cable FD, press-contacted parts of the press-contacting portion for the press-contacting blades 42 are less liable to be affected by this force.

Please replace paragraph no. 2, page 15 with the following amended paragraph:

In this embodiment, the plurality of guide ribs 51a for arranging the insulated conductors D₁ which are held in intimate contact with the outer face of the cover 70 in a row are formed on

the cover 70, and extend in the forward-rearward direction, ~~and~~ Therefore, even when a pulling force acts on the flat cable FD in the direction of the width of the connector (that is, in the upward-downward direction in Fig. 7), the insulated conductors D will not be displaced in the direction of the width, and the press-contacted portions are prevented from being affected by this pulling force.

The flat cable end-processing structure of the invention, as well as the end processing method of the invention, is not limited to the construction of the above embodiment, and various forms can be adopted on the basis of the subject matter of the invention.

Please replace paragraph no. 4, page 15 with the following amended paragraph:

For example, in the above embodiment, although each press-contacting terminal fitting 40 provided with the press-contacting blades 42 has the L-shaped interconnecting portion 43 provided between the terminal connecting portion 41 and the pair of press-contacting blades 42, known press-contacting terminal fittings, ~~having~~, that have a straight interconnecting portion, may be used. Further, the connector housing, the cover and so on are not limited to the illustrated constructions in the above embodiment.